Senate Bill No. 1970

assed the Senate	August 30, 2002
	Secretary of the Senate
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assed the Assembly	y August 29, 2002
	Chief Clerk of the Assembly
This bill was receive	ved by the Governor this day of
	, 2002, at o'clockM.
	Private Secretary of the Governor

CHAPTER _____

An act to amend Sections 114710, 114990, and 115060 of, to add Section 25203.5 to, and to add Chapter 10 (commencing with Section 115300) to Part 9 of Division 104 of, the Health and Safety Code, and to add Section 43022.5 to the Public Resources Code, relating to radiation.

LEGISLATIVE COUNSEL'S DIGEST

SB 1970, Romero. Radiation Safety Act of 2002.

(1) The existing hazardous waste control law prohibits any person from managing any hazardous waste, except as provided in that law, or in the regulations adopted by the Department of Toxic Substances Control. A violation of the hazardous waste control laws is a crime.

This bill would prohibit the disposal of radioactive waste, as defined, at a hazardous waste disposal facility that is subject to the state hazardous waste control laws. The bill would authorize the department, in consultation with the California Integrated Waste Management Board and the State Department of Health Services, to adopt regulations and permit conditions relating to safety and monitoring procedures, and restrictions and limitations on maximum concentrations for, the disposal of TENORM, as defined.

Since the violation of these requirements would be a crime, the bill would impose a state-mandated local program by creating a new crime

(2) Existing law prohibits any person from burying, throwing away, or disposing of radioactive waste except in a manner that will result in no significant radioactive contamination of the environment.

The existing Radiation Control Law requires the State Department of Health Services, among other things, to issue licenses, and prohibits the state department from issuing a license to receive radioactive material for disposal unless specified requirements are satisfied, including that the land on which the radioactive waste is to be buried is owned by the federal or state government.

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Under existing law, the Southwestern Low-Level Radioactive Waste Disposal Compact specifies that California is to serve as the state required to host the regional low-level radioactive waste disposal facility for the permanent isolation of low-level radioactive waste pursuant to specified federal requirements and the requirements of the host state. A violation of the provisions regulating radioactive waste is a crime.

This bill would exempt the disposal of solid or hazardous waste that contains TENORM at a solid or hazardous waste disposal facility from the licensing requirements imposed under the Radiation Control Law.

The bill would enact the Radiation Safety Act of 2002 and would require any license issued pursuant to the Radiation Control Law by the state department pursuant to that law to also comply with the restrictions of the Radiation Safety Act of 2002. The bill would prohibit the state department from adopting any exemption from the requirements of the Radiation Safety Act of 2002.

The bill would prohibit any generator or owner of radioactive waste from disposing of radioactive waste, or any materials containing byproduct, source, or special nuclear material, or transmitting to any person or entity for disposal, that material or waste, except at a specified licensed facility. The bill would prohibit any person from transferring for recycling radioactive material, as specified. The bill would also prohibit any person from transferring a radioactive material or an item containing contamination from a radioactive material, for reuse by a person who is not licensed, or transferring or delivering any radioactive material to a person not possessing a license or permit specifically authorized to possess radioactive material.

The bill would exclude from the act specified materials and activities, including the reuse or recycling of a radioactive item by an unlicensed federal entity, to the extent the item remains on the property, and under the control, of the federal entity. The bill would also exclude from the act the handling and disposal of wastes containing TENORM if those wastes meet specified criteria.

(3) The existing California Integrated Waste Management Act of 1989 requires the California Integrated Waste Management Board to adopt and review regulations setting forth standards for solid waste handling. The term "solid waste" is defined, for the

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purpose of the act, as excluding radioactive waste regulated pursuant to the Radiation Control Law and the board has no enforcement or regulatory authority with regard to a facility that accepts low-level radioactive waste.

This bill would prohibit any person from disposing of radioactive waste, as defined, and would prohibit a TENORM generator from submitting TENORM generated by petroleum and natural gas production and refining, geothermal production, or mining to a class III management unit, a class II waste management unit that receives specified amounts of decomposable solid waste, or an unclassified unit that receives inert waste.

The bill would authorize the board, in consultation with the Department of Toxic Substances Control, the State Water Resources Control Board, and the State Department of Health Services to adopt regulations relating to testing and screening criteria, safety and monitoring requirements, emergency response, and notification procedures and on the disposal of TENORM at those waste management units. The bill would permit any TENORM waste that is not a hazardous waste to be disposed of at a class II waste management unit that is dedicated primarily to the management of industrial or designated wastes. The bill would also authorize the enforcement agency, in consultation with those state agencies, to impose conditions when renewing a solid waste facility permit to restrict the disposal of solid waste material containing TENORM and radioactive waste.

- (4) The bill would declare that the provisions of the bill are severable and that if any provision of the bill or its application is held invalid, that invalidity would not affect other provisions or applications that can be given effect without the invalid provision or application.
- (5) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason. __ 5 __ SB 1970

The people of the State of California do enact as follows:

SECTION 1. Section 25203.5 is added to the Health and Safety Code, to read:

- 25203.5. (a) Notwithstanding any other provision of law, no person may dispose of radioactive waste, as defined in subdivision (f) of Section 115301, at a hazardous waste disposal facility that is subject to this chapter.
- (b) (1) The department, in consultation with the California Integrated Waste Management Board and the State Department of Health Services, may adopt regulations and establish permit conditions to implement this section. The regulations and permit conditions adopted pursuant to this section may include, but are not limited to, any of the following:
- (A) Testing and screening criteria for radioactivity, worker and site safety and monitoring requirements, emergency response, radioactive waste handling and response procedures, and notification procedures.
- (B) Restrictions or limits, including, but not limited to, maximum concentrations permitted for disposal of TENORM, as defined in subdivision (h) of Section 115301.
- (2) If the department adopts regulations pursuant to this subdivision that prescribe maximum radioactive concentrations or establish limits on amounts or types of TENORM for disposal in a hazardous waste facility, any TENORM above those concentrations or limits shall be disposed of at a facility that possesses a license issued by one of the following to dispose of that particular type and amount of waste:
- (A) The State Department of Health Services pursuant to Chapter 8 (commencing with Section 114960).
 - (B) The Nuclear Regulatory Commission.
- (C) A state that has entered into an agreement pursuant to Section 2021 of Title 42 of the United States Code.
- (3) Any permit conditions established by the department pursuant to this subdivision shall take effect at all affected facilities on the same date.
- (c) The provisions of this section may not be construed as limiting the authority of the department to prohibit or otherwise regulate the disposal of wastes containing TENORM at hazardous

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waste facilities as it determines necessary to protect public health, safety, and the environment.

- SEC. 2. Section 114710 of the Health and Safety Code is amended to read:
- 114710. For the purposes of this article, the following terms have the following meanings:
- (a) "Department" means the State Department of Health Services.
- (b) "Environment" means all places outside the control of the person responsible for the radioactive materials.
- (c) "Field tracer study" is any project, experiment, or study that includes provision for deliberate introduction of radioactive material into the environment for experimental or test purposes.
- (d) "Person" includes any association of persons, copartnership or corporation.
- (e) "Radiation," or "ionizing radiation," means gamma rays and X-rays; alpha and beta particles, high-speed electrons, neutrons, protons, and other nuclear particles; but not sound or radio waves, or visible, infrared, or ultraviolet light.
- (f) "Radioactive material" means any material or combination of materials that spontaneously emits ionizing radiation.
- (g) "Radioactive waste" means any radioactive material that is discarded as nonusable.
- (h) "Significant" or "significantly," as applied to radioactive contamination, means concentrations or amounts of radioactive material as are likely to expose persons to ionizing radiation or radioactivity equal to or greater than the guide levels published by the Federal Radiation Council, or its successor entity.
- (i) "Radiological monitoring" means the measurement of the amounts and kinds of radioactive materials in the environment.
- SEC. 3. Section 114990 of the Health and Safety Code is amended to read:
- 114990. (a) The department is designated as the agency responsible for the issuance of licenses pursuant to this chapter. In carrying out its duties under this section, the department may enter into an agreement with the Division of Occupational Safety and Health and other state and local agencies to conduct technical evaluations of license applications prior to issuance of licenses. The agreements shall also include provisions for conducting inspections in accordance with Section 115095.

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- (b) Any license issued by the department pursuant to this chapter shall also comply with the restrictions of Chapter 10 (commencing with Section 115300).
- SEC. 4. Section 115060 of the Health and Safety Code is amended to read:
- 115060. (a) The department shall provide by rule or regulation for general or specific licensing of persons to receive, possess, or transfer radioactive materials, or devices or equipment utilizing these materials. That rule or regulation shall provide for amendment, suspension, or revocation of licenses.
- (b) The department may require registration and inspection of sources of ionizing radiation other than those that require a specific license, and compliance with specific safety standards to be adopted by the department.
- (c) (1) The department may exempt certain sources of ionizing radiation or kinds of uses or users from the licensing or registration requirements set forth in this section when the department makes a finding that the exemption of these sources of ionizing radiation or kinds of uses or users will not constitute a significant risk to the health and safety of the public.
- (2) Any exemption made pursuant to this subdivision shall be adopted as a regulation pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.
- (3) The department may not adopt or grant any exemptions from the requirements of Section 115302.
- (d) Regulations adopted pursuant to this chapter may provide for recognition of other state or federal licenses as the department may deem desirable, subject to registration requirements as the department may prescribe.
- (e) The department shall adopt registration and certification regulations for mammography equipment. These regulations shall include, but not be limited to, all of the following requirements:
- (1) An X-ray machine used for mammography shall be specifically designed for mammography and inspected by the department, or deemed satisfactory by the department based upon evidence of certification by the American College of Radiology mammography accreditation program, or an accreditation program that the department deems equivalent before it is certified.

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- (2) That all persons who have a certificate for mammography equipment follow a quality assurance program to be adopted by the department to ensure the protection of the public health and safety.
- (3) That quality assurance tests, as determined by the department, are performed on all mammography equipment located in a mobile van or unit after each relocation of the mobile van or unit to a different location for the purpose of providing mammography. This equipment shall be recalibrated if images are not of diagnostic quality as determined by the department. A written record of the location of mobile vans or units with dates and times shall be maintained and available for inspection by the department.
- (4) All mammography equipment shall be registered with and certified by the department. If this mammography equipment is certified by a private accreditation organization, the department shall take into consideration evidence of this private certification when deciding to issue a mammography certification.
- (5) All licenses, permits, and certificates issued by the department pursuant to this chapter and the Radiologic Technology Act (Chapter 6 (commencing with Section 114840)) relating to the use of mammography equipment shall be publicly posted pursuant to this section and regulations adopted by the department.
- (f) To further ensure the quality of mammograms, the department shall require all mammogram facilities, other than mobile units or vans, to operate quickly and efficiently so as to ensure that the facilities are able to develop mammograms of diagnostic quality prior to when the patient leaves the facility.
- (g) The disposal of solid or hazardous wastes that contain TENORM, as defined in subdivision (h) of Section 115301, at a solid waste disposal facility or hazardous waste disposal facility is exempt from the licensing requirements imposed by this section.
- SEC. 5. Chapter 10 (commencing with Section 115300) is added to Part 9 of Division 104 of the Health and Safety Code, to read:

Chapter 10. Radiation Safety Act of 2002

115300. This chapter shall be known and may be cited as the Radiation Safety Act of 2002.

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115301. For purposes of this chapter, unless otherwise specified, the following definitions shall only apply to this chapter:

- (a) "Background" means the local level of radioactivity from nature of like materials without enhancement by human activity, plus the local levels of fallout from nuclear weapons testing and the local deposition of fallout from past nuclear accidents located elsewhere in the world, including, but not limited to, the nuclear accident in Chernobyl. "Background" shall be determined as a range of values using statistical tests and sampling protocols consistent with those specified in MARSSIM.
- (b) "Best available technology" means any technique, equipment, technology, or methodology that the department finds to be most effective at detecting radiation or radioactivity, taking into consideration economic feasibility and commercial availability. If the department determines that a person's existing equipment is equivalent to the best available technology, the equipment shall be deemed the "best available technology" for purposes of this definition without requiring the purchase of new equipment.
- (c) "Generator" means any person, by site, whose act or process produces radioactive material or radioactive waste subject to this chapter or whose act causes a radioactive material or radioactive waste to become subject to this chapter.
- (d) "MARSSIM" means the Multi-Agency Radiation Survey and Site Investigation Manual developed by the United States Department of Defense, Department of Energy, Nuclear Regulatory Commission, and Environmental Protection Agency, published as NUREG-1575, EPA 402-R-97-016, and DOE/EH-0624, and any current or future revisions.
- (e) "Naturally occurring radioactive material" means material containing radionuclides that are naturally present in the environment in materials, including, but not limited to, rocks, soil, minerals, natural gas, petroleum, and ground or surface water at concentrations that occur naturally. Naturally occurring radioactive material does not include material containing only radionuclides that are artificially created or any of the types of radioactive material described in subdivision (g).
- (f) "Radioactive waste" means any discarded radioactive material with radioactivity above the background level when measured with the best available technology.

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- (g) (1) "Radioactive material" includes, but is not limited to, all of the following, when in concentrations in excess of the background levels as measured with best available technology:
 - (A) Byproduct material, defined as either of the following:
- (i) Any radioactive material, excluding special nuclear material, that is yielded in, or made radioactive by, exposure to a radiation incident to the process of producing or utilizing special nuclear material.
- (ii) Tailings or waste produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including, but not limited to, discrete surface wastes resulting from solution extraction processes. Underground ore bodies depleted by those solution extraction operations are not byproduct material for the purposes of this chapter.
- (B) Source and special nuclear material, as defined in subdivisions (e) and (f) of Section 114985.
- (C) FUSRAP material, defined as any material containing radioactivity from the Formerly Utilized Sites Remedial Action Program, irrespective of the time and location of the generation of that material, that does not otherwise meet the conditions of subparagraph (A) or (B).
- (D) Any other material determined by the department by regulation to be radioactive material for the purposes of this section. The department may not determine TENORM to be radioactive material for the purposes of this section.
- (2) "Radioactive material" as defined in this subdivision does not include either of the following:
 - (A) TENORM.
- (B) Any material listed in subdivisions (a) to (e), inclusive, of Section 115303.
- (h) "TENORM" means technologically enhanced naturally occurring radioactive material that past or present human activities, including, but not limited to, petroleum and natural gas production and refining, geothermal production, and mining operations unrelated to activities primarily intended to extract or use uranium or thorium, have incidentally concentrated or exposed to the accessible environment in concentrations in excess of the naturally occurring local surface background. TENORM

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does not include the radioactive materials described in paragraph (1) of subdivision (g).

- 115302. (a) Except as provided in Section 115303, and notwithstanding any other provision of law, no generator or owner of radioactive waste may dispose of, or transmit to any person or entity for disposal, radioactive waste in this state, except to a facility possessing a specific license or permit issued pursuant to Chapter 8 (commencing with Section 114960), or by the Nuclear Regulatory Commission, to dispose of that particular type and amount of radioactive waste.
- (b) Except as provided in Section 115303, and notwithstanding any other provision of law, no person may do any of the following:
- (1) Transfer for recycling radioactive material, or material containing radioactive contamination in the state, in a manner that causes the radioactivity to be transferred or delivered to a person who is not licensed pursuant to Chapter 8 (commencing with Section 114960) or by the Nuclear Regulatory Commission.
- (2) Transfer radioactive material or an item containing contamination from a radioactive material, to a person for reuse who is not licensed pursuant to Chapter 8 (commencing with Section 114960) or by the Nuclear Regulatory Commission.
- (3) Transfer or deliver radioactive material to a person not possessing a license or permit specifically authorizing possession of that radioactive material pursuant to Chapter 8 (commencing with Section 114960) or by the Nuclear Regulatory Commission.
- 115303. This chapter does not apply to any of the following materials or activities:
- (a) Short-lived radioactive materials of the type that are commonly used in medicine, biotechnology, and academia, that are at the end of their storage-to-decay period, and that are managed by an approved storage-to-decay program, including an onsite facility or a centralized facility.
- (b) Liquid and gaseous radioactive effluents and releases to sanitary sewers, of the types, amounts, and concentrations specified in the regulations adopted by the Nuclear Regulatory Commission or the department.
- (c) Scintillation liquids from research and animal tissues containing the amounts of tritium and carbon-14 specified in Section 20.2005 of Title 10 of the Code of Federal Regulations, as that section read on January 1, 2003.

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- (d) The technetium-99 associated with molybdenum-99 radioisotope generators of the type used in medicine.
- (e) Radioactive materials intentionally inserted into products for their radioactive purpose and that are specifically exempted by the Nuclear Regulatory Commission from Part 30 (commencing with Section 30.1) and Part 40 (commencing with Section 40.1) of Title 10 of the Code of Federal Regulations, as those regulations read on the date of enactment of the Energy Policy Act of 1992 (P.L. 102-486).
- (f) The reuse or recycling of a radioactively contaminated item by a person licensed to possess that item, pursuant to Chapter 8 (commencing with Section 114960) or by the Nuclear Regulatory Commission, to the extent that the item remains on the licensed site and is subject to regulatory control of its onsite use.
- (g) The reuse or recycling of a radioactive item by an unlicensed federal entity, to the extent the item remains on the property of the federal entity and under its control.
- (h) The handling and disposal of wastes containing TENORM that meet both of the following criteria:
 - (1) Do not also contain radioactive waste.
- (2) Are below any limit established by the Department of Toxic Substances Control pursuant to subdivision (b) of Section 25303.5.
- SEC. 6. Section 43022.5 is added to the Public Resources Code, to read:
- 43022.5. (a) Notwithstanding any other provision of law, no person may dispose of radioactive waste at a solid waste facility.
- (b) (1) A TENORM generator may not submit TENORM generated by petroleum and natural gas production and refining, geothermal production, or mining for disposal at any of the following:
 - (A) A class III waste management unit.
- (B) Any class II waste management unit that receives sufficient quantities of decomposable solid waste so that a landfill gas collection and control system is installed, is required to be installed, or will be required to be installed, prior to closure of the unit.
- (C) An unclassified unit that is authorized to receive inert waste.

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- (2) The board, in consultation with the Department of Toxic Substances Control, the State Water Resources Control Board, and the State Department of Health Services, may adopt regulations restricting, prohibiting, or otherwise relating to the disposal of additional types of wastes containing TENORM at waste management units identified in paragraph (1).
- (c) (1) Any TENORM waste that is not a hazardous waste may be disposed of at a class II waste management unit that is dedicated primarily to the management of industrial or designated wastes, as defined in Section 13173 of the Water Code, if that class II waste management unit does not receive sufficient quantities of decomposable solid waste so that a landfill gas collection and control system is installed, is required to be installed, or will be required to be installed, prior to closure of the unit.
- (2) The board, in consultation with the Department of Toxic Substances Control, the State Water Resources Control Board, and the State Department of Health Services, may adopt regulations establishing requirements to implement this section. These regulations may include, but are not limited to, testing and screening criteria for radioactivity, worker and site safety and monitoring requirements, emergency response, radioactive waste handling and response procedures, and notification procedures. The regulations may also establish restrictions, conditions, or limits on concentrations, types, or amounts, of TENORM that may be disposed of at any solid waste management unit.
- (3) If the board adopts regulations that prescribe maximum concentrations or establish limits on types or amounts of TENORM pursuant to paragraph (2), any TENORM waste above those maximum concentrations or limits may be disposed of only in a permitted hazardous waste facility in accordance with Section 25203.5 of the Health and Safety Code or at a facility that possesses a license issued by one of the following to dispose of that particular type and amount of waste:
- (A) The State Department of Health Services pursuant to Chapter 8 (commencing with Section 114960) of the Health and Safety Code.
 - (B) The Nuclear Regulatory Commission.
- (C) A state that has entered into an agreement pursuant to Section 2021 of Title 42 of the United States Code.

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- (d) The enforcement agency, in consultation with the state board, the appropriate California regional water quality control board, and the State Department of Health Services, may impose conditions when renewing an individual solid waste facilities permit to restrict the disposal of solid waste material containing TENORM and radioactive waste, as defined in Section 115301 of the Health and Safety Code. Any permit conditions imposed pursuant to this subdivision shall be, at minimum, as restrictive as the provisions of this section and regulations adopted by the state board.
- (e) The provisions of this section may not be construed as limiting the authority of the state board or a California regional water quality control board to prohibit or otherwise regulate the disposal of solid waste material containing TENORM at solid waste facilities.
- (f) (1) An owner or operator of a solid waste facility may not knowingly accept or dispose of radioactive waste in a manner other than in accordance with this section and Part 9 (commencing with Section 114650) of Division 104 of the Health and Safety Code.
- (2) An owner and operator of a solid waste facility may not be deemed to have knowingly accepted nor disposed of radioactive waste for the purposes of this subdivision if, at a minimum, the owner and operator meets both of the following criteria:
- (A) The owner or operator has not received any notice that the waste contains radioactive material.
- (B) On or before January 1, 2004, the owner or operator implements all of the following mechanisms:
- (i) Posts signs at the facility that provide notice to customers that the facility is prohibited from accepting radioactive waste.
- (ii) Provides an annual written notification to the customers of the facility that the facility is prohibited from accepting radioactive waste for disposal, or provides that notification on an alternative frequency determined by the board or enforcement agency.
- (iii) Evaluates or monitors incoming wastes to detect the presence of radioactive waste at the facility consistent with any regulations adopted pursuant to this section.
- (g) For the purposes of this section, the following terms have the following meanings:

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- (1) "Class II waste management unit" has the same meaning as defined in Section 20250 of Title 27 of the California Code of Regulations and is a solid waste management unit that has been so classified by a California regional water quality control board.
- (2) "Class III waste management unit" has the same meaning as defined in Section 20260 of Title 27 of the California Code of Regulations and is a solid waste management unit that has been so classified by a California regional water quality control board.
- (3) "Radioactive waste" has the same meaning as defined in subdivision (f) of Section 115301 of the Health and Safety Code.
- (4) "TENORM" has the same meaning as defined in subdivision (h) of Section 115301 of the Health and Safety Code.
- (5) "Unclassified waste management unit" means a waste management unit that receives solid waste but has not been classified as a class I, class II, or class III waste management unit by a California regional water quality control board.
- (6) "TENORM generator" means any person, by site, whose act or process produces TENORM or whose act first causes a material to become TENORM.
- SEC. 7. The provisions of this act are severable. If any provision of this act or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.
- SEC. 8. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

Approve	d		_, 2002
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